

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all previous versions and listings of claims in this application.

Claim Listing:

Claims 1-11: (Cancelled).

12. (New) A fault current limiting system, the system comprising:

switching means, which are connected to a circuit breaker aimed at managing current breaking operation on a power distribution line in absence of fault, said switching means providing a fast switching operation;

a current path comprising at least a limiting fuse, said path being arranged in parallel to said switching means;

a switching system to replace a blown set of fuses with an unblown set of fuses after a fault limiting operation has occurred;

a control unit, which receives signals indicative of starting fault conditions, said control unit estimating the amplitude of the fault current based on said signals, said control unit sending a switch command to the switching means and to the circuit breaker when the fault current is estimated to rise above a predefined threshold,

said control unit sending a switch command only to the circuit breaker when the fault current is estimated to remain under said predefined threshold.

13. (New) The fault current limiting system of claim 12, wherein the switching means comprises a fast mechanical switch.

14. (New) The fault current limiting system of claim 12, wherein the switching means comprises an explosive cartridge.

15. (New) The fault current limiting system of claim 12, wherein the switching system is provided with at least three unblown sets of fuses.

16. (New) The fault current limiting system of claim 12, wherein the switching system comprises a revolver switch.

17. (New) The fault current limiting system of claim 12, wherein the control unit controls and operates also the switching system.

18. (New) The fault current limiting system of claim 12, further comprising means for short circuit closing after the fault, wherein the short circuit closing completes a restoration sequence of the fault current limiting system.

19. (New) The fault current limiting system of claim 12, further comprising a moveable track, wherein one or more of the components of the fault current limiting system are onboard of the moveable track.

20. (New) An electrical distribution switchboard comprising a fault current limiting system according to claim 12.

21. (New) A method for limiting fault current, the method comprising the following steps:

providing a current breaking operation on a power distribution line in absence of fault;

providing a fast switching operation responsive to a fault;

providing a current path comprising at least a limiting fuse arranged parallel to a fast switching operation path;

automatically replacing a blown set of fuses with an unblown set of fuses responsive to a fault limiting operation;

receiving signals indicative of starting fault conditions in a control unit;

estimating an amplitude of a fault current based on said received signals,

when the fault current is estimated to rise above a predefined threshold, sending a first switching command from the control unit to effect both the fast switching operation and the current breaking operation, and

when the fault current is estimated to remain under said predefined threshold, sending another switching command from the control unit to effect only the current breaking operation.

22. (New) A fault current limiting system, the system comprising:

a fast switch device capable of providing a fast switching operation;

a circuit breaker connected to the fast switch device, said circuit breaker controlling a current breaking operation on a power distribution line in absence of fault;

a current path comprising at least a limiting fuse, said current path being arranged in parallel to said fast switch device;

a fuse revolver switch that automatically replaces a blown set of fuses with an unblown set of fuses responsive to detection of a fault condition;

a control unit operably connected to receive signals indicative of a fault condition, said control unit estimating an amplitude of the fault current,

wherein, responsive to said fault condition, said control unit sends a switch command to both the fast switch device and to the circuit breaker when the fault current is estimated to rise above a predefined threshold,

wherein said control unit sends a switch command only to the circuit breaker when the fault current is estimated to remain under said predefined threshold.